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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims.

1-13. (Cancelled)

14. (Currently Amended) A computer executable method comprising:

receiving as input a first source document and a first document type definition for the first source document, the first source document conforming to the first document type definition;

receiving as input a target document type definition, the target document type definition being different from the first document type definition;

comparing examining the first document type definition and the target document type definition with one another to identify common patterns in the document type definitions, each of the common patterns being a substructure having a particular occurrence of a respective element and one or more of the sub-elements of the element, and common patterns being patterns common to existing in each of the first document type definition and target document type definition, wherein identifying common patterns includes including identifying an element that is common to exists in each of the first and the target document type definitions but has a different name in the first document type definition than in the target document type definition; and

using the common patterns identified by comparing examining the first and the target document type definitions with one another to map without user intervention elements and sub-elements of the first document type definition in the first source document to recode the first source document according to the target document type definition to equivalent elements and sub-elements, including changing a first tag name of a first element in the first source document to a different second tag name.

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15. (Cancelled)

16. (Previously Presented) The method of claim 14, wherein:

the target document type definition was derived automatically from one or more second documents.

17. (Previously Presented) The method of claim 14, wherein:

receiving the first document type definition comprises producing the first document type definition for the first source document if the document type definition for the first source document does not already exist.

18. (Original) The method of claim 14, wherein identifying common patterns comprises:

performing pattern matching between structures defined by the first document type definition and structures defined by the second document type definition.

19. (Cancelled)

20. (Previously Presented) The method of claim 14, wherein identifying common patterns further comprises:

using heuristics to find common structure in the first document type definition and the second document type definition.

21. (Cancelled)

22. (Currently Amended) A computer executable method of converting the format of a source document to the format of a set of source documents, the source document conforming to a first document type definition, the set of source documents having documents each conforming to a target document type definition the first source document, the method comprising:

examining the first document type definition and the target document type definition to identify[[ing]] patterns common to the source document and the set of source documents, each of the patterns being a substructure having a particular occurrence of an element and one or more of the sub-elements of the element, wherein identifying patterns includes including identifying an

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element that is ~~common to~~ <u>exists in each of</u> the first ~~and second~~ source <u>document and the set of</u> <u>source</u> documents but has a different name in the first source document than in the ~~second~~ <u>set of</u> source documents;

mapping, without user intervention, elements and sub-elements in the common pattern of the source document to equivalent elements and sub-elements in the common pattern of the set of source documents, including mapping a first element in the first source document to a second element in the second source document based on the identified common patterns, the first element and the second element having different element names; and

replacing tag names for the each of the elements and sub-elements in the common pattern of the source document with the equivalent tag names of the elements and sub-elements in the common pattern of the set of source documents.

23. (Previously presented) The method of claim 22, wherein identifying patterns common to the source document and the set of source documents comprises:

examining document type definitions for the source document and the set of source documents.

24. (Original) The method of claim 23, further comprising:

producing the document type definition for the source document if the document type definition for the source document does not already exist.

25. (Currently Amended) A computer program residing on a computer-readable medium, the computer program comprising instructions operable to cause a computer system to:

receive as input a first source document and a first document type definition for the first source document, the first source document conforming to the first document type definition;

receive as input a target document type definition, the target document type definition being different from the first document type definition;

~~compare~~ <u>examine</u> the first document type definition and the target document type definition ~~with one another~~ to identify common patterns <u>in the document type definitions, each</u> <u>of the common patterns being a substructure having a particular occurrence of an element and</u>

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one or more of the sub-elements of the element, and common patterns being patterns ~~common to~~
existing in each of the first document type definition and the target document type definition,
~~wherein to identify common patterns includes to identify~~ including identifying an element that ~~is~~
~~common to~~ exists in each of the first and the target document type definitions but has a different
name in the first document type definition than in the target document type definition; and

use the common patterns identified by ~~comparing~~ examining the first and the target
document type definitions ~~with one another~~ to map without user intervention elements and sub-
elements in the first document type definition of the first source document to recode the first
source document according to the target document type definition to equivalent elements and
sub-elements, including instructions operable to cause the computer system to change a first tag
name of a first element in the first source document to a different second tag name.

26-27 (Cancelled)

28. (Currently Amended) A computer system comprising:

a storage device for storing a source document and a set of source documents, the source
document having a format different from that of the set of source documents, the source
document conforming to a first document type definition and the documents in the set of source
documents each conforming to a target document type definition; and

a computer processor configured by a mapping program to identify patterns common to
the source document and the set of source documents by ~~comparing~~ examining the first
document type definition and the target document type definition to identify common patterns in
the document type definitions ~~with one another~~, each of the common patterns being a
substructure having a particular occurrence of an element and one or more of the sub-elements of
the element, and map, without user intervention, elements and sub-elements in the common
pattern of the source document to equivalent elements and sub-elements in the common pattern
of the set of source documents, ~~wherein to identify patterns includes~~ including to identify an
element that is common to the first and second source documents but has a different name in the
first source document than in the second source document and wherein to map elements includes
to map a first element in the first source document to a second element in the second source

document based on the identified common patterns, the first element and the second element having different element names.

29. (Previously Presented) The computer program of claim 25, further comprising instructions operable to cause a computer system to:

produce the first document type definition for the first source document if a document type definition for the first source document does not already exist.

30. (Previously Presented) The computer program of claim 25, wherein the instructions operable to cause a computer system to identify common patterns comprise instructions operable to cause a computer system to:

perform pattern matching between structures defined by the first document type definition and structures defined by the second document type definition.

31. (Cancelled)

32. (Previously Presented) The computer program of claim 25, wherein the instructions operable to cause a computer system to identify patterns common to the first and second source documents further comprises instructions operable to cause a computer system to:

use heuristics to find common structure in the first document type definition and the second document type definition.

33. (Cancelled)

34. (Currently Amended) A computer program residing on a computer-readable medium for converting the format of a source document to the format of a set of source documents, the source document conforming to a first document type definition, the set of source documents having documents each conforming to a target document type definition the first source document, the computer program comprising instructions operable to cause a computer system to:

examine the first document type definition and the target type definition to identify patterns common to the source document and the set of source documents, each of the patterns

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being a substructure having a particular occurrence of an element and one or more of the sub-elements of the element, ~~wherein to identify patterns includes~~ including to identify an element that is ~~common to~~ exists in each of the first ~~and second~~ source document and the set of source documents but has a different name in the first source document than in the second source document,

map, without user intervention, elements and sub-elements in the common pattern of the source document to equivalent elements and sub-elements in the common pattern of the set of source documents, including mapping a first element in the first source document to a second element in the second source document based on the identified common patterns, the first element and the second element having different element names; and

replace tag names for the each of the elements and sub-elements in common pattern of the source document with the equivalent tag names of the elements and sub-elements in common pattern of the set of source documents.

35. (Previously Presented) The computer program of claim 34, wherein the instructions causing a computer system to identify patterns common to the source document and the set of source documents comprises instructions causing a computer system to:

examine document type definitions for the source document and the set of source documents.

36. (Previously Presented) The computer program of claim 35, further comprising instructions causing a computer system to:

produce the document type definition for the source document if the document type definition for the source document does not already exist.

37-40. (Cancelled)

41. (New) The method of claim 14, wherein:

the substructure of at least one of the common patterns further includes attribute information of the respective element.